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ABSTRACT

Developed by the Illinois Articulation Initiative (IAI), this report provides recommendations for improving articulation through state high schools, community colleges, and institutions of higher education. The recommendations are presented by field of study for business, clinical laboratory science, early childhood education, elementary education, secondary education, music, nursing, and psychology. Each program area includes a recommended list of general education core and area core courses, a description of the courses, and a list of IAI panel members. Selected recommendations for specific fields include the following: (1) adopt a framework for clinical laboratory science that defines specific educational curricula and competencies to prepare students for clinical lab practice; (2) students in secondary education teaching programs must select a major and a teaching minor from among those disciplines taught in high schools; (3) students who intend to major in music are encouraged to complete the Associate in Fine Arts degree in music instead of the Associate of Arts or Science degree; (4) a nursing model must incorporate conceptual, technical, contextual, interpersonal communication, integrative, and adaptive competencies for certified nurse assistants, licensed practical nurses, associate degree nurses, and baccalaureate degree nurses; and (5) students who intend to major in psychology must complete three courses from either developmental, abnormal, industrial/organizational, personality, or social psychology. Tables of clinical laboratory and nursing competencies are included. (TGI)

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ED 390 499

THE ILLINOIS ARTICULATION INITIATIVE
MAJOR FIELD PANELS' RECOMMENDATIONS

FOR

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
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Clinical Laboratory Science
Education - Early Childhood
Education - Elementary
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Music
Nursing
Psychology

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Steering Panel on October 6, 1995

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BUSINESS

Business programs at community colleges and bachelor's degree institutions include courses and majors in general business, accounting, finance, marketing, and management. The following recommendations apply to courses and programs in all of these fields. Community and junior college students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer. Further, students should work with an advisor early in their program if they intend to transfer as juniors into a bachelor's degree business program.

General Education Core Courses[1] — **37-41 semester credits**

Communications	9 semester credits
Mathematics	3-6 semester credits
Calculus (Required)	
Physical and Life Sciences	7-8 semester credits
Humanities/Fine Arts	9 semester credits
Social and Behavioral Sciences	9 semester credits
Principles of Macroeconomics (3)	
Principles of Microeconomics (3)	

[1] *General education courses are described in the Illinois General Education Core Curriculum.*

Business Core Courses — **12-16 semester credits**

Business Statistics	3-4 semester credits
Computer Applications & Business Systems Concepts	3-4 semester credits
Financial Accounting	3-4 semester credits
Managerial Accounting	3-4 semester credits

Other Transferable Business Courses — **3-11 semester credits**

Introduction to Business — 3 semester credits
May be required by community colleges; will be accepted for elective credit by four-year institutions.

Business Law OR Legal and Social Environment of Business — 3 semester credits
May be required by community colleges; will be accepted for transfer credit by four-year institutions in place of an equivalent course in Business Law or Legal and Social Environment of Business.

Other business courses, such as marketing or management, may be required by community colleges or may be helpful to students in determining their level of interest in a business major. These courses will be accepted for credit by bachelor's degree institutions but may not meet the specific requirements of a bachelor's degree in business.

Depending upon the accreditation held by a bachelor's degree institution, certain community college course selections in the "Other Transferable Business Courses" category may lengthen the time required to earn a bachelor's degree. A student planning to transfer to a bachelor's degree program in business should consult with the bachelor's degree institution for specific information about how additional business courses will transfer.

Business Course Descriptions

Core Business Courses

BUSINESS STATISTICS (3-4 semester credits): The basic concepts of statistical analysis used in business decision making, including probability and how uncertainty is dealt with in real life. The student will analyze and work out simple problems and should be able to recognize applications of different statistical techniques, interpret the results of analyses, and recognize instances in which statistical techniques have been misused. The following concepts and statistical techniques are included: measures of central tendency and variability; random variables and probability distributions; binomial, normal, and sampling distributions; estimation; tests of hypotheses; chi square tests; linear regression and correla'·'on; and one-way analysis of variance. Prerequisite: Finite Mathematics or higher.

COMPUTER APPLICATIONS AND BUSINESS SYSTEMS CONCEPTS (3-4 semester credits): Designed primarily for students planning to major in a field of commerce, students are acquainted with and trained in the use of business computer packages, including word processing, database management, spreadsheet, and presentation software and INTERNET access methods. Operating systems such as DOS, OS/2, WINDOWS, and UNIX are reviewed. In addition, the basics of management information systems are covered.

FINANCIAL ACCOUNTING (3-4 semester credits): Presents accounting as an information system that produces summary financial statements, primarily for users external to a business or other enterprise. Students study the forms of business organization and the common transactions entered into by businesses. The emphasis is on understanding and applying basic accounting principles and other concepts that guide the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. How to analyze and interpret historical financial statements, as well, and the limitations of using these in making forward-looking business decisions is included. The primary content emphasis will be accounting for current assets and liabilities, long-term assets and liabilities, corporations' cash flow statements, and financial statement analyses.

MANAGERIAL ACCOUNTING (3-4 semester credits): Presents accounting as a system of producing information for use in internally managing a business. The course emphasizes the identification, accumulation, and interpretation of information for planning, controlling, and evaluating the performance of the separate components of a business. Included is the identification and measurement of the costs of producing goods or services and how to analyze and control these costs. Decision models commonly used in making specific short-term and long-term business decisions also are included.

Other Transferable Business Courses

INTRODUCTION TO BUSINESS (3 semester credits): Introduction to business functions, operations, and organization. Includes ownership and management, forms of organizations, finance, business ethics, personnel and labor-management relations, and marketing.

BUSINESS LAW (3 semester credits): Introduction to the legal system as it affects business activity. Areas of concentration include formation and nature of contracts, the agency relationships, and the Uniform Commercial Code Law of Sales and Commercial Paper.

OR

LEGAL AND SOCIAL ENVIRONMENT OF BUSINESS (3 semester credits): A study of the legal and social environment of business, with emphases on business ethics and corporate social responsibilities. Areas of concentration include governmental regulation of business, securities law, consumer protection law, labor law, and employment law.

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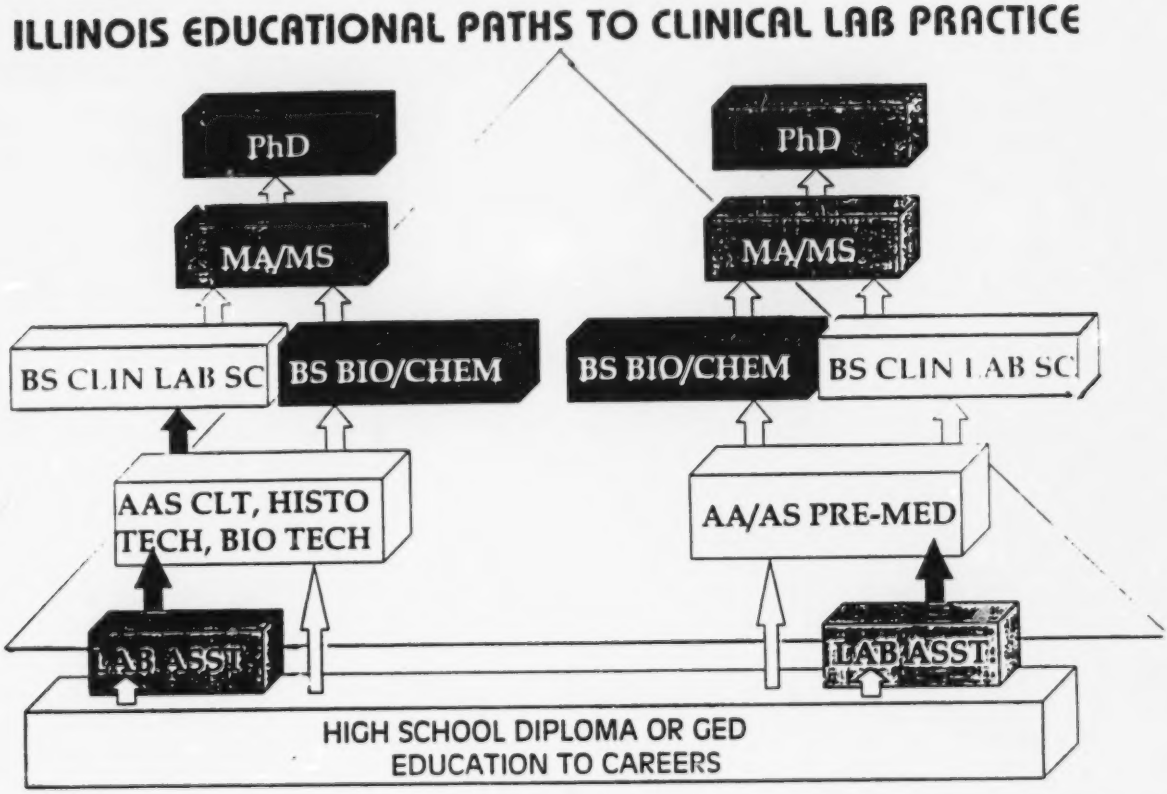
CLINICAL LABORATORY SCIENCE

Career and Educational Pathways

The clinical laboratory science panel adopted a paths-to-practice framework for clinical laboratory science, as illustrated in the figure below. These pathways represent the broad base of knowledge leading to practice in a variety of areas within laboratory practice: phlebotomy, histology, cytology, biotechnology, veterinary assistant, and food processing, as well as for advanced practice in chemistry, hematology, microbiology, or immunohematology.

The panel further defined these educational paths through specific articulated general and professional curriculum. The table on the next page shows the articulation of core general education coursework from the Level I Practitioner to Level II Practitioner (associate degree) to Level III Practitioner (baccalaureate degree) in clinical laboratory science.

The panel concluded that high school preparation should meet the minimum public college and university admission requirements, including two years of health occupations coursework with a medical laboratory emphasis as a requirement for Level I Practitioner and the foundation for a health career. General education and prerequisite science coursework was identified for the A.A.S. in Clinical Laboratory Technology and the B.S. in Clinical Laboratory Science, using the General Education Core Curriculum. The table also shows the recommended curriculum for an associate in science degree, an alternative path into a baccalaureate program.



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GENERAL EDUCATION AND PREREQUISITE SCIENCE COURSES IN CLINICAL LABORATORY SCIENCE

	High School	Community College		University
	Level I Testing Personnel *15 units required*	*A.A.S. in Clinical Laboratory Technology*	*A.A./A.S.*	*B.S. in Clinical Laboratory Science*
General Education		**General Education Core[1]**	**General Education Core[1]**	**General Education Core[1]**
Communication	4 years: reading/writing, speaking/listening and literature	3 cr. composition 3 cr. speech	3 cr. composition 3 cr. composition 3 cr. speech	3 cr. composition 3 cr. composition 3 cr. speech
Math	3 years: algebra I, geometry, algebra II	3 cr. math (statistics)	3 cr. math (statistics) 3 cr. math	3 cr. math (statistics) 3 cr. math
Science	3 years: biology, chemistry, & physical sciences	4 cr. general biology 4 cr. chemistry (general/inorganic)	4 cr. general biology 4 cr. chemistry (general/inorganic)	4 cr. general biology 4 cr. chemistry (general/inorganic)
Social Sciences	3 years: history and government	3 cr. social science	3 cr. social sciences 6 cr. social sciences	3 cr. social sciences 6 cr. social sciences
Humanities		3 cr. humanities/fine arts	3 cr. humanities/fine arts	3 cr. humanities/fine arts 6 cr. humanities/fine arts
Additional Prerequisite Arts/Sciences		4 cr. microbiology 4 cr. biology (zoology, A&P, physiology, or gen bio II)	4 cr. microbiology 4 cr. biology (zoology, A&P, physiology or gen bio II)	3-4 cr. microbiology with lab 4 cr. biology (zoology, A&P, physiology or gen bio II) 4-8 cr. molecular biology or genetics* 3-4 cr. immunology
		3 cr. college algebra[2]		
			4 cr. chemistry (general II or inorganic) 8 cr. (organic and biochemistry) 4 cr. physics*	4 cr. chemistry (general II or inorganic) 8 cr. (organic and biochemistry) 4 cr. physics*
Technical Preparation	2 years: Health Occupations I and II to include service internship/apprenticeship	35-40 cr.hr. CLT coursework (current range) including clinical coursework/practicum		30-66 cr. hr. CLS coursework (current range) including clinical practicum

* Highly Recommended
[1] Community college and university courses partially fulfill requirements in the transferable General Education Core Curriculum.
[2] Dependent upon placement in mathematics, might not be needed.

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Assumptions

The clinial laboratory science panel viewed articulation as a voluntary process designed to facilitate educatonal progress for students. The panel adopted and continually refined the following assumptions as it proceeded through the process of developing the educational competencies.

1. Articulation allows for flexibility, choice, expanded practice opportunities, and diversity. This model is futuristic and committed to changing curriculum to reflect health care reform and changes to current practice.

2. Each educational institution's mission, goals, and standards for admission, progression, and graduation are preserved.

3. Statewide articulated clinical laboratory science models can be developed based on competencies, skills, and general education needed at each level.

4. Competencies at each level of education build on previous competencies. Secondary education provides basic support for the development of clinical laboratory science education programs and competencies. Levels I and II on the career ladder also can be offered at the next educational level.

5. Completion of any level of clinical laboratory science education means that a graduate may or may not desire to progress on to the next level.

6. Laboratorians in practice and education must collaborate in identifying and promoting levels of competencies.

7. Faculty involvement is critical to developing articulation models.

8. The National Accrediting Agency for Clinical Laboratory Sciences criteria for accreditation represents an expected standard of quality for clinical laboratory science programs, but the need for greater adaptability to the changing environment necessitates broad curricular changes.

9. Accreditation and certification agencies should be willing to respond to the changing health care system and the need to broaden standards and examinations. This model assumes that students and programs will be certified and accredited by the appropriate agencies. Students must be certified in clinical laboratory science at each level to proceed on to the next level.

10. Participating institutions will agree to develop curricula in such a way that guarantees that competencies at that level of education are part of the curriculum and that ensures graduates possess the competencies.

Competency Model

The curriculum model developed by the clinical laboratory science panel follows the federal definitions of practice under the Clinical Laboratory Improvement Amendment of 1988 (CLIA) and acknowledges the lack of licensure for the profession in Illinois. *The Essentials and Guidelines of Accredited Educational Programs for the Medical Laboratory Technician and Technologist* published by the National Accrediting Agency for Clinical Laboratory Sciences also were taken into consideration. Also reviewed were the skills and competencies described in the Bioscience Industry Skill Standard Project, Illinois State Board of Education Task List for Medical Laboratory Aide, a survey of job descriptions at panelist's institutions, the National Certification Agency for Medical Laboratory Personnel Job Analysis Task List, the Clinical Laboratory Manager Association's survey of

"Employers' Expectations of Career-Entry Competencies," the results of the American Society for Clinical Pathology study "Defining the Roles of Medical Technologists and Medical Laboratory Technicians," and descriptors of Level I and Biotechnology competencies by national professional associations and task forces.

The levels of practice reflect behavior expected of those persons engaged in the practice of the profession, but can be expected to evolve as the federal personnel guidelines are further developed or modified. The competency categories (conceptual, technical, professional, contextual, communication, integrative, and adaptive) were adapted to clinical laboratory science from a professional education model described by Joan Stark, Malcolm Lowther, and Bonnie Hagerty in a monograph entitled *Responsive Professional Education* (1986). In addition, the panel adapted Susan Beck's "Assessing the Educational Preparation of Clinical Laboratory Scientists" to the model. The model looks to the future of the profession by expanding the roles of the clinical laboratorian into areas of biotechnology information and research.

"Competency" is defined as those behaviors and abilities appropriate for a level of practice. A competency is a broader concept than "task," which is a specific job or responsibility assigned to an individual. For each competency category, the panel developed a set of competencies across levels of practice. **The competencies are additive across the levels of practice and are not repeated for each level.** (The specific competencies by level are presented following this narrative.) The pathways framework helped the panel describe each distinct expectation of ability and capacity for each stage of educational preparation in clinical laboratory science. This framework provides sufficient latitude to respond to change and integrates expectations of general education into the curricula. While this framework provides a consistent approach to curriculum development over time, it also allowed the panel to respond to the breadth of the charge.

The competency statements require high school, community college, and public or private university clinical laboratory science programs to guarantee the level of ability or competency within each level of curriculum. As a forward looking and fluid model, the competency statements are based on the premise that changes will occur within the field and that the model should be adaptive to such change. The model describes a level of standards that provide direction to the individual practitioner, but is not prescriptive. This broad conceptualization of competency represents the connecting thread that holds the model together, while expanding practice parameters. At the same time, the structure provides sufficient direction for programs and faculty to develop curricula that meet the expectations of the multiple competencies, while allowing for institutional flexibility. Tech-prep programs offered at the high school level also can be offered at the community college or university level. None of the curricula are precluded from being offered by the next higher level of education. In addition, the model incorporates a broader base of knowledge, both general and technical, into its conceptualization, including research competencies and broader management competencies for the Level III practitioner.

The clinical laboratory science panel worked closely with the Consortium of Clinical Laboratory Educators, comprised of all accredited baccalaureate and associate degree programs in the state, whose purpose is to conduct surveys, develop models and core curricula, support recruitment efforts in the profession, and develop curricular material. The Consortium has achieved a national reputation in its statewide coordination of educational issues in the field. In October 1994, the Consortium endorsed the work of the panel, and, in March 1995, the Consortium made a commitment to aid institutions in implementing the model by year 2000. The panel plans to continue to develop the professional curriculum to accompany the competency statements.

Recommendations for Implementation

1. Expand the Consortium of Clinical Laboratory Educators in Illinois to include high school teachers of health occupations programs in medical assisting and laboratory assistant.

2. Promote the model through public relations and formal meetings of educators, practitioners, and industry.

3. Encourage collaboration and communication between high school science teachers and CLS educators/practitioners.

4. Develop a bridging process with a goal by the year 2000 of eliminating the proficiency examination for evaluating prior professional coursework. This process should also include adoption of a minimum number of professional hours of credit transferrable at each level, given that the sending institution and receiving institutions have agreed to the model's conditions.

5. Work with the State Board of Education to use the model as a framework for development of Skills Standards for the laboratory professions cluster.

CLINICAL LABORATORY AND BIOTECHNOLOGY COMPETENCIES

COMPETENCIES	Level I	Level II	Level III
Conceptual: theoretical/foundational knowledge upon which professional practice is based.	Uses basic concepts of biology, physical science (chemistry and physics), and communication to perform simple tests (as defined by the Clinical Laboratory Improvement Act- CLIA) in a variety of settings, such as hospital labs, private and veterinary clinical labs, physician offices, histology and cytology labs, and biotechnology industry.	Uses general concepts in anatomy, physiology, chemistry, microbiology, social sciences, communications, pathophysiology, ethics, interpersonal relationships, professional and legal aspects of clinical laboratory practice, leadership and management in the laboratory, and clinical laboratory history, trends, and theories to perform moderately complex testing as defined by CLIA.	Uses advanced concepts in anatomy, physiology, physics, genetics, microbiology, parasitology, immunology, molecular biology, social sciences, humanities, interpersonal communications, group dynamics, biochemistry, mathematics and statistics, pathophysiology, ethics, clinical laboratory history, trends, and theories, professional and legal aspects of the laboratory, management in the laboratory in greater depth, teaching-learning theory in the laboratory, and in addition, uses concepts of research and consultation to perform highly complex testing (CLIA).
Technical: psychomotor, interpersonal, and cognitive skills.	Collects, prepares, and disposes of specimens and determines acceptability of specimens in performance of basic laboratory techniques. Performs analytical tests and basic quality control procedures according to state and federal regulations. Recognizes tests and quality control results that deviate from expected results. Recognizes sources of error in measurements. Confirms abnormal results per the policies in place of employment. Operates lab instruments within level of complexity allowed. Recognizes an equipment malfunction. Performs preventive maintenance on equipment according to allowable complexity. Adheres to established safety protocols.	Performs analytical assays: chemical, biological, clinical (including histology), environmental, and robotic. Takes corrective action in resolving problems generated from lab data, given pre-set strategies. Analyzes quality control data and takes action according to written procedure. Responds to questions regarding results and methods. Operates and calibrates all analytical instrumentation Takes corrective actions in resolving instrumentation problems. Determines acceptability and optimum conditions of test reagents.	Performs complex analytical assays: chemistry, biological, clinical (including histology and cytology), environmental, and robotic. Designs and verifies quality control/ assurance programs, conducting quality improvement activities. Integrates data from several lab departments as part of clinical correlation and quality assurance. Resolves problems related to generation of lab data. Answers questions regarding test accuracy/precision-specificity and sensitivity. Compares, evaluates, and validates new equipment, procedures and methods. Implements new and revised technical and operational procedures.

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Professional: career marketability, professional identity and ethics, scholarly concern for professional improvement and continuing education.	Ethics: Accepts the ethical standards of the profession. Recognizes rights of the individual as stated in the Patient Bill of Rights. Recognizes ethical dilemmas and brings them to the attention of supervisor. Adheres to federal, state, and local regulations governing laboratories (i.e. OSHA, CLIA, FDA, JCAHO). Recognizes inappropriate testing and seeks assistance when unsure of next step or corrective action necessary for situation. Professional Identity: Demonstrates pride in the profession and understands the role that a Level I Practitioner plays on the health care team. Communicates with other laboratory personnel and health care team members. Professional Improvement: is responsible for personal career development and participates in continuing education. Career Marketability: Recognizes career opportunities and can prepare resume,interview and plan professional career.	Ethics: Ensures the rights of the individual in research process. Resolves ethical dilemmas encountered in patient testing in consultation with supervisor. Professional Identity: Exemplifies pride in the profession and understands the role that a Level II Practitioner plays on the health care team. Professional Improvement: Uses basic research principles to select a method and apply to clinical laboratory practice. Uses informational science programs and networks for effective laboratory practice. Career Marketability: Recognizes personal strengths and areas of intellectual strength when seeking career advancement. Creates career opportunities.	Ethics Develops ethical standards that guide professional behavior and judgments. Recognizes situations in clinical laboratory practice that present potential ethical dilemmas. Makes decisions and shows willingness to take action when presented with ethical dilemmas. Develops and implements research projects in compliance with accepted ethical standards. Professional Identity: Develops a sense of pride in the profession and understands the role of the clinical laboratory scientist in the health care system. Professional Improvement: Conducts research studies. Interprets and applies research findings to current practice. Updates knowledge through attendance at professional workshops or conferences, in-services, and professional journals. Can independently learn and locate information through reading, consultants, and networking with colleagues. Career Marketability Role model and mentor, facilitating development of job opportunities for others and human resource development.
Contextual: the social, economic and cultural setting for professional practice.	Relates to patients and colleagues with cultural background different than own. Recognizes sociocultural differences that may affect testing and results. Identifies the role of staff members and setting where employed.	Understands governmental processes and policies that affect the health care industry and laboratory.	Understands the impact of socioeconomic factors on health care system. Assesses and analyzes the impact of socioeconomic changes in the health care system in the coordination and management of lab operations. Identifies socioeconomic differences in lab personnel/students that may effect teaching/learning. Designs educational plans within socioeconomic conditions of the learner/practitioner. Incorporates the ethical principles and consideration of socio-economic and cultural differences in the design of research.

Communication: writing, speaking, listening and reading comprehension, as well as computer literacy.	Records and documents data and reports test results, communicating reference ranges and specimen requirements. Shows respect for individuals. Accepts responsibility to understand verbal requests, directions, or ideas. Displays ability to read and comprehend procedures, memos, and reports. Retrieves/enters data in computers. Displays interactive skills with clients/patients, peers, and supervisors. Respects patient confidentiality. Reports findings and experiences.	Manages information provided electronically. Understands written and verbal requests, directions, or ideas and implements procedures accordingly. Interacts with vendors. Writes memos.	Uses computers to make decisions. Reads and comprehends professional literature. Shares ideas and consults in a team setting. Presents information orally to a large group if required. Provides continuing education information in either written format or orally. Writes and revises technical procedures and policies. Writes position descriptions, evaluation performances, and other laboratory reports and correspondence. Writes proposals to purchase equipment and develops the justification and recommendations for purchases.
Integrative: use of theory in practice, including reasoning, decision making, and problem solving.		Combines knowledge and technical skills to perform routine tests and validate results.	Combines knowledge and professional and technical skills to solve problems, such as trouble-shooting instruments, and quality control, as well as validates personnel, operations, methods and procedures.
Adaptive: working with change, detecting changing conditions, adapting to change, and anticipating the need for change.	Demonstrates ability to learn new procedures and adapt to changes in the lab.		Plans and implements changes needed to meet the needs of the laboratory.

CLINICAL LABORATORY SCIENCE PANEL

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EARLY CHILDHOOD EDUCATION

To teach young children in Illinois public schools (birth to age 8), teachers must be certified by the State of Illinois. To transfer into an approved baccalaureate program in early childhood education as a junior, students must complete a minimum of 60 semester credits. Community and junior college students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer. Since admission is competitive, completion of the courses recommended below does not guarantee admission. Students should be aware that a minimum grade point average of 2.25 (and for some universities a 2.5) on a 4.0 scale is required for program admission, and passage of a basic skills (reading, writing, grammar, and math) test is also required.

General Education Core Courses[1]		**Additional General Education for Teacher Certification**	**Total**
Communication	9 semester credits		9
Mathematics	3-6 semester credits	0-3 semester credits	6
Physical/Life Science	7-8 semester credits	4-5 semester credits	12
Humanities[2]	9 semester credits	3 semester credits	12
Social/Behavioral Sciences[2,3]	9 semester credits	3 semester credits	12
U.S./American History (3 credits)			
American/U.S. National Government (3 credits)			
		Health, Safety, and Nutrition	2
	37-41 semester credits	**12-16 semester credits**	**53**

[1] *General education courses are described in the Illinois General Education Core Curriculum.*
[2] *Select at least one non-Western culture 3-semester credit course in either category.*
[3] *History courses may be applied toward either Humanities or Social Science requirements.*

Area of Concentration **0-9 semester credits**

Zero to 9 semester credits in one academic discipline at the sophomore level or above, selected in consultation with an advisor. Acceptable disciplines include: Mathematics; Biology, Chemistry, or Physics; Economics, History, Political Science, Psychology, or Sociology; and Art, Music, English, a single Foreign Language, History, Philosophy, or Theatre.

Professional Early Childhood Education Courses **0-9 semester credits**

Introduction to Early Childhood Education (3 semester credits)
Child Growth and Development (3 semester credits)
Exceptional Child (3 semester credits)
Clinical Experience/Observation Hours (0-1 semester credits)

This list is not meant to limit the transferability of additional courses in the discipline or to discourage the development of new courses. The current articulation process should continue between individual institutions for courses not on this list. Academic advisors should continue to be knowledgeable of transfer requirements at various colleges and universities, and students should regularly consult their advisors throughout their academic careers. The panel believes it is in the best interest of students and the discipline to continue to offer the depth and breadth of courses that are available at many institutions.

Early Childhood Education Course Descriptions

INTRODUCTION TO EARLY CHILDHOOD EDUCATION (3 semester credits): An overview of early childhood care and education, including the basic values, structure, organization and programming in early childhood. Examination of the student's personal qualities in relationship to expectations of the field. Directed observation in a variety of programs and settings. Objectives: 1) identify and describe some basic historical and philosophical influences upon early childhood education; 2) identify and describe professional responsibilities, ethics, and career options in the field of early childhood; 3) discuss the complex role and responsibilities of personnel in an early childhood setting; 4) observe, discuss, and assess the similarities and differences of a variety of early childhood programs and models; 5) discuss program schedules, curriculum and classroom environment based on developmentally appropriate practices for infants/toddlers, preschoolers, and primary-aged children; 6) identify and describe the impact of families and other significant adults on infants/toddlers, preschoolers, and school-age children; 7) discuss the major issues facing early childhood care and education today and their impact on early childhood programs; and 8) identify the state and federal rules and regulations governing early childhood programs. Textbook(s) will be selected regularly by the department. Supplementary readings will be selected by the course instructor. Selection criteria for textbooks, supplementary readings, and media resources include evaluation of the applicability of the material to course objectives and performance outcomes, reliability of the content of the material, its consistency with the current knowledge base of the profession, readability, and cost. Students will be responsible for assigned readings and written assignments; for demonstration, performance, and/or observation assignments defined by the instructor; and for performance on periodic examinations and assessment throughout the course. Students will be evaluated on written performance, class participation, and completion of assignments.

CHILD GROWTH AND DEVELOPMENT (3 semester credits): A foundation course in theory and principles of development, prenatal through early adolescence with emphasis on the young child. In-depth study of physical, social/emotional, cognitive, language, and aesthetic development. An examination of theory to include Piaget, Erikson, Vygotsky, Skinner, and others. An exploration of child development in the context of gender, family, culture, and society. An emphasis on the implications for early childhood professional practice. Objectives: 1) identification of the physical/social/emotional/cognitive development of children and the factors that contribute to variations in development; 2) comprehension of stages and variations of physical growth and development, including prenatal; 3) identification of implications of the child's development and learning in the context of gender, family, culture, and society; 4) comprehension of current implications of Piaget's theories on cognitive-linguistic development; 5) comprehension of current implications of Erikson's theories on social-emotional development; 6) comprehension of current implications of Vygotsky's theories on the cognitive and language development; 7) comprehension of current implications of Skinner's theory on cognitive and language development; 8) comprehension of the components and variations influencing current theories of aesthetic development; 9) application of theory to the interpretation of child behavior; and 10) recognition of the factors that contribute to typical and atypical development in children. Textbook(s) will be selected regularly by the department. Supplementary readings and media resources will be selected by the course instructor. Selection criteria for textbooks and supplementary media resources will consist of an evaluation of the applicability of the material to course objectives and performance outcomes; the reliability of the content of the material and its consistency with the current knowledge base of the profession; readability; and cost. Students will be responsible for assigned readings and written assignments; for demonstration, performance, and/or observation assignments defined by the instructor; and for performance on periodic examinations and assessment throughout the course. Students will be evaluated on written performance, class participation, and completion of assignments.

EXCEPTIONAL CHILD (3 semester credits): Overview of children with exceptional cognitive, physical, social and emotional characteristics; analysis of developmental and educational needs imposed by exceptionality; identification, intervention strategies, methods, and programs designed to meet their needs, including, but not limited to, children identified as learning disabled. Study of applicable federal and state laws and requirements: Individuals with Disabilities Education Act, Americans with Disabilities Act, Individualized Family Service Plan, Individualized Education Plan, and inclusive programs. Fulfills requirements of School Code, Article 21-2a. Students shall demonstrate: 1) comprehension of basic disabilities as they are seen in children and adolescents, birth through age 21; 2) greater consciousness of the relationship of disabilities and typical child development and the processes involved; 3) increased ability to relate the social, cognitive, emotional, cultural, and physical components of child development to disability conditions in children; 4) greater facility to respond nonsimplistically to complex public and private problems that focus on disabling conditions; 5) consciousness of different values and frames of reference involved in society's reaction to disabilities; 6) comprehension of key characteristics of exceptional children; 7) preliminary familiarity with a number of major current psychosocial and behavioral approaches and their instructional application to education; 8) ability to develop intervention strategies for children and adolescents with diverse disabilities in inclusive situations; and 9) familiarity with the impact of exceptionalities on family systems and approaches to family partnerships. Suggested methods of instruction include: lecture; reading of texts, periodicals in Exceptional Education and related fields; discussion; observation of children and youth in special and inclusive settings; interview of parents; film/videotapes; simulation activities, incorporating role play; and essays on issues in the field. Suggested evaluation activities include multiple choice exams; essay exams; class presentations on issues in the field; analysis of observation and interview materials related to theory and practice in the field; critique of media presentations; and review of written essays and reports for analytic content and comprehension.

OBSERVATION/CLINICAL EXPERIENCE HOURS[1] (0-1 semester credit): Documented clinical experience(s) involving observation of and interaction with children and practitioners at work, according to specified guidelines, within the appropriate subject matter and age category. This experience, comprising a minimum of 30-45 hours, is planned, guided, and evaluated by a mentor or supervisor and can occur in a variety of educational settings, including those with diverse student populations. Upon satisfactory completion of this course, the student will be able to:

- identify childhood/adolescent characteristics;
- relate to the children/adolescents in appropriate ways;
- evaluate his/her own potential to succeed in teaching; and
- identify characteristics of successful teaching and learning.

[1]Can be integrated or offered as a separate course.

Health Course for Certification General Education Requirements

HEALTH, SAFETY, AND NUTRITION (2-3 semester credits): Personal health of the individual, including nutrition, health and safety issues with emphasis on meeting health needs for children in group settings. A healthy life style, preventive health and community health are examined. The two-semester credit course, containing 30 class hours, incorporates the topics indicated below by code A, in order to meet teacher certification requirements in health in general education. The three-semester credit hour course, containing 15 additional class hours, adds the topics coded C below.

Major Topics	Appropriate Time (Class Hours)		Learning Outcomes
Concept of total health and its influences	A	3	Define personal health of the individual, including nutrition, exercise, hygiene, healthy lifestyle, and preventive health.
Environment that supports positive emotional health	A C	4 1	Identify environmental factors that affect mental health, including violence, substance abuse, family mental health, emotional health of teachers and caregivers of children.
Community health	A	2	Identify community and state or national resources and referrals for maintaining positive health in individuals and child care settings.
Illinois Department of Children & Family Services Licensing Standards for nutrition, health, and safety	C	2	Demonstrate basic knowledge of nutrition, health and safety licensing requirements for childcare settings and demonstrate a basic understanding of the childcare worker's obligations for health, nutrition and safety of children.
Screening procedures to assess child's health status	C	1	Identify and describe necessary screening procedures used in group home/care settings to assess a child's health status.
Signs and symptoms of common and communicable illness	A C	3 1	Describe signs and symptoms of common acute illnesses, and clearly describe procedures to be followed when a child becomes ill in group/home care setting.
Identification of communicable illness. Policies and procedures for controlling communicable illnesses	A	3	Demonstrate the ability to identify signs and symptoms of common communicable diseases and describe control measures in homes, institutions, and group/home child care settings.
Dealing with chronic health problems	A	2	Name chronic conditions that can affect adult and child health. Describe the care provider's responsibilities in dealing with a child's chronic health problems.
Safety guidelines for supervision of children. Arrangement and maintenance of indoor and outdoor equipment	C	4	Demonstrate the ability to follow essential safety guidelines for the supervision of children as well as the selection, arrangement, and maintenance of indoor and outdoor playground equipment.
Basic First-Aid and emergency procedures, record keeping, supervision, and reporting.	A C	4 2	Identify and describe basic first-aid and the proper use of first-aid items. Describe emergency procedures in group care settings and process of record keeping and communication with the child's parents regarding accidents or illness.
Proper nutrition	A	6	Identify principal sources and primary functions of nutrients essential for healthy growth and development.
Guidelines for healthy nutritional lifestyle	A	3	Discuss nutritional concerns in modern lifestyles, balance of caloric intake with activity/exercise levels and safe food handling.
Snacks and meals that fulfill nutritional requirements for children and include multicultural menus	C	4	Plan and provide a wide variety of snacks and meals that best meet nutritional requirements for children at specific developmental levels.
Implementing developmentally appropriate nutritional experiences in the preschool curriculum	C	5	Demonstrate the ability to make food preparation and mealtime a developmentally appropriate learning experience for children in group/home care settings. Implement nutrition education as an ongoing part of the developmentally appropriate curriculum.

EARLY CHILDHOOD EDUCATION PANEL

Public Universities

Sureshrani Paintal, Chicago State University
Guda Gayle-Evans, Illinois State University
Sandra Styer, Northeastern Illinois University
Billie Thomas, Northern Illinois University
Beverly Gulley, Southern Illinois University at Carbondale
Susan Nall, Southern Illinois University at Edwardsville
Daniel J. Walsh, University of Illinois at Urbana-Champaign

Private Institutions

Shirley Morgenthaler, Concordia University
Gayle Mindes, DePaul University
Betty Hutchison, National-Louis University, **CO-CHAIR**

Community Colleges

E. Lynn Suydam, Belleville Area College
Christine Bachelder, Black Hawk College
Rosalind Frye, Richard J. Daley College
Arleen Prairie, Harold Washington College
Carol Neuhauser, William Rainey Harper College
Mary Ellen Monroe-White, Lincoln Land Community College
Peg Callaghan, Oakton Community College, **CO-CHAIR**
Nancy Morse, Parkland College
Marjorie Judson, Carl Sandburg College
Mary Jo Oldham, Southeastern Illinois College
Angela Fentress, State Community College

High Schools

Elizabeth Muench, Capital Area Vocational
Marilyn Jenkins, Stagg High School

Consultants

Michael Long, State Board of Education
Sue Burge, State Board of Education
Eileen Borgia, Illinois Association for the Education of Young Children
Gina Reuther, President, Head Start Association
J. Lee Kreader, Department of Children and Family Services
Jane Peckwas, Illinois Child Care Association

Transfer Coordinators

Melissa Templeton, Black Hawk College
Carolyn Bartlett, Illinois State University

Staff

Jan Ignash, Board of Higher Education
Kathy Oglesby, Illinois Community College Board

ELEMENTARY EDUCATION

To teach in Illinois public elementary schools (grades K-9), teachers must be certified by the State of Illinois. To transfer into an approved baccalaureate program in elementary education as a junior, students must complete a minimum of 60 semester credits. Since admission is competitive, completion of the courses recommended below does not guarantee admission. Community and junior college students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer. Students should be aware that a minimum grade point average of 2.25 (and for some universities a 2.5) on a 4.0 scale is required for program admission, and passage of a basic skills (reading, writing, grammar, and math) test is also required.

General Education Core Courses[1]		**Additional General Education for Teacher Certification**	**Total**
Communication	9 semester credits		9
Mathematics[2]	3-6 semester credits	0-3 semester credits	6
Physical/Life Science	7-8 semester credits	4-5 semester credits	12
Social/Behavioral Sciences[3]	9 semester credits		9
American/U.S. National Government (3) General Psychology (3)			
Humanities/Fine Arts[3]	9 semester credits	6 semester credits U.S./American History (3) English (3)	15
		2 semester credits Health/Physical Development	2
	37-41 semester credits	**12-16 semester credits**	**53**

[1] *General education courses are described in the Illinois General Education Core Curriculum.*
[2] *Mathematics for Elementary Teachers is a prerequisite for mathematics teaching methods courses.*
[3] *Select at least one non-Western culture 3-semester credit course in either category.*

Area of Concentration **0-9 semester credits**

Zero to 9 semester credits in one academic discipline at the sophomore level or above, selected in consultation with an advisor. Acceptable disciplines include: Mathematics; Biology, Chemistry, or Physics; Economics, History, Political Science, Psychology, or Sociology; and Art, Music, English, a single Foreign Language, History, Philosophy, or Theatre.

Professional Education Courses **0-7 semester credits**

Zero to 7 semester credits from professional education core courses, selected in consultation with an advisor. The professional education core includes the following:

Introduction to Education (2-3 semester credits)
Child Growth and Development OR Human Growth and Development (2-3 semester credits)
Observation/Clinical Experience Hours (0-1 semester credits)

This list is not meant to limit the transferability of additional courses in the discipline or to discourage the development of new courses. The current articulation process should continue between individual institutions for courses not on this list. Academic advisors should continue to be knowledgeable of transfer requirements at various colleges and universities, and students should regularly consult their advisors throughout their academic careers. The panel believes it is in the best interest of students and the discipline to continue to offer the depth and breadth of courses that are available at many institutions.

Education Course Descriptions

INTRODUCTION TO EDUCATION (2-3 semester credits): An overview of American education as both a professional and a public enterprise. Social, historical, and philosophical foundations give perspective to an examination of current issues, policies, and trends in the field of education, including cultural diversity. May include organization and structure, finance, and curriculum. On successful completion of the course, the student will be able to:

- evaluate teaching as a profession and analyze the impact of various social forces on the practicing teacher;
- explain historical, philosophical and sociological influences on education;
- identify and compare the tenets of selected educational philosophies and their relationships to present educational practices;
- relate basic sociological concepts to American society and American schools;
- demonstrate a knowledge of prevalent organization and governance patterns in education systems;
- define federal, state, and local responsibilities for education;
- summarize the funding sources for education at all levels;
- identify the major educational organizations and explain their purposes and contributions to American education;
- identify, evaluate, and explain selected curricular patterns, educational programs, and instructional innovations;
- identify and discuss current and emerging issues in education;
- demonstrate a knowledge of the meaning and benefits of multicultural education as an active process of good pedagogy;
- compare and contrast international education systems with the American education system; and
- demonstrate knowledge of basic needs, characteristics, and behavioral patterns in the teaching/learning process.

CHILD GROWTH AND DEVELOPMENT (3 semester credits): A foundation course in theory and principles of development, prenatal through early adolescence with emphasis on the young child. In-depth study of physical, social/emotional, cognitive, language, and aesthetic development. An examination of theory to include Piaget, Erikson, Vygotsky, Skinner, and others. An exploration of child development in the context of gender, family, culture, and society. An emphasis on the implications for early childhood professional practice. Objectives: 1) identification of the physical/social/emotional/cognitive development of children and the factors that contribute to variations in development; 2) comprehension of stages and variations of physical growth and development, including prenatal; 3) identification of implications of the child's development and learning in the context of gender, family, culture, and society; 4) comprehension of current implications of Piaget's theories on cognitive-linguistic development; 5) comprehension of current implications of Erikson's theories on social-emotional development; 6) comprehension of current implications of Vygotsky's theories on the cognitive and language development; 7) comprehension of current implications of Skinner's theory on cognitive and language development; 8) comprehension of the components and variations influencing current theories of aesthetic development; 9) application of theory to the interpretation of child behavior; and 10) recognition of the factors that contribute to typical and atypical development in children. Textbook(s) will be selected regularly by the department. Supplementary readings and media resources will be selected by the course instructor. Selection criteria for textbooks and supplementary media resources will consist of an evaluation of the applicability of the material to course objectives and performance outcomes; the reliability of the content of the material and its consistency with the current knowledge base of the profession; readability; and cost. Students will be responsible for assigned readings and written assignments; for demonstration, performance, and/or observation assignments defined by the instructor; and for performance on periodic examinations and assessment throughout the course. Students will be evaluated on written performance, class participation, and completion of assignments.

HUMAN GROWTH AND DEVELOPMENT (2-3 semester credits): A study of growth and development of the individual from conception through adulthood. Emphasis on social, emotional, cognitive, and physical aspects of growth and behavior related to school settings with special emphasis on the middle school years. A minimum of 20 hours of clinical experience focused on the social, emotional, cognitive and physical aspects of behavior, preschool through the twelfth grades with observation of the learners, not methodology, is strongly recommended.

OBSERVATION/CLINICAL EXPERIENCE HOURS[1] (0-1 semester credit): Documented clinical experience(s) involving observation of and interaction with children and practitioners at work, according to specified guidelines, within the appropriate subject matter and age category. This experience, comprising a minimum of 30-45 hours, is planned, guided, and evaluated by a mentor or supervisor and can occur in a variety of educational settings, including those with diverse student populations. Upon satisfactory completion of this course, the student will be able to:

- identify childhood/adolescent characteristics;
- relate to the children/adolescents in appropriate ways;
- evaluate his/her own potential to succeed in teaching; and
- identify characteristics of successful teaching and learning.

[1]Can be integrated or offered as a separate course.

ELEMENTARY EDUCATION PANEL

Public Universities

Carol Helwig, Eastern Illinois University
George Garrett, Governors State University
Gayle Flickinger, Illinois State University
Carl Tomlinson, Northern Illinois University
Billy G. Dixon, Southern Illinois University at Carbondale
Lela DeToye, Southern Illinois University at Edwardsville
Mary Bay, University of Illinois at Chicago
Bonnie Armbruster, University of Illinois at Urbana-Champaign

Private Institutions

Deborah Brotcke, Aurora University, **CO-CHAIR**
Madonna Murphy, College of St. Francis
Meg Carroll, St. Xavier University

Community Colleges

Melanie G. Anewishki, Kennedy-King College
Lisa Putnam Cole, Heartland Community College
Colleen Gift, Highland Community College
Kathy Harris, Lincoln Trail College
Jeanne Legan, Joliet Junior College
Diane McNeilly, Kishwaukee College, **CO-CHAIR**
Karen Owens, College of Lake County
Anne Donnersberger, Moraine Valley Community College
Elaine Johnson, Rend Lake College

Consultant

Nancy Patton, State Board of Education

Transfer Coordinators

Fred Peterson, Heartland Community College
Rita Pearson, Eastern Illinois University
Beth Gierach, St. Xavier University

Staff

Marjorie Hinjosa, Board of Higher Education
Barbara Risse, Illinois Community College Board

SECONDARY EDUCATION

To teach in an Illinois public high school (grades 6-12), teachers must be certified by the State of Illinois. To transfer into an approved baccalaureate program in secondary education as a junior, students must complete a minimum of 60 semester credits (up to a maximum of 64 semester credits) from the list below. Community and junior college students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer. Since admission is competitive, completion of these courses alone does not guarantee admission. Students should be aware that a minimum grade point average of 2.25 (and for some universities a 2.5) on a 4.0 scale is required for program admission, and passage of a basic skills (reading, writing, grammar, and math) test is also required.

General Education Core Courses[1]		**Additional General Education For Teacher Certification**	**Total**
Communication	9 semester credits		9
Mathematics	3-6 semester credits		3
Physical/Life Science	7-8 semester credits	1-2 semester credits	9
Social/Behavioral Sciences[2]	9 semester credits		9
American/U.S. National Government (3) General Psychology (3)			
Humanities/Fine Arts[2]	9 semester credits	6 semester credits U.S./American History (3) English (3)	15
		2 semester credits Health/Physical Development	2
	37-41 semester credits	**9-10 semester credits**	**47**

[1] *General education courses are described in the Illinois General Education Core Curriculum.*
[2] *Select at least one non-Western culture 3-semester credit course in either category.*

Education Courses **up to 9 semester credits**

Up to 9 semester credits selected from the following courses, including experience working with adolescents:

Introduction to Education (2-3 semester credits)
Educational Psychology OR Human Growth and Development (2-3 semester credits)
Education of Exceptional Individuals (2-3 semester credits)
Observation/Clinical Experience Hours (0-1 semester credits)

While these credits will be accepted in transfer by baccalaureate institutions, they may or may not substitute for upper-division professional coursework required for certification.

Teaching Major and Minor **Remainder to total at least 60 semester credits**

Since secondary education is not a major at the baccalaureate level, students need to select a major and a teaching minor from among those disciplines taught in high schools. Courses in the major and minor should be selected in consultation with an adviser.

This list is not meant to limit the transferability of additional courses or to discourage the development of new courses. The current articulation process should continue between individual institutions for courses not on this list. Academic advisors should continue to be knowledgeable of transfer requirements at various colleges and universities, and students should regularly consult their advisors throughout their academic careers. The panel believes it is in the best interest of students and the discipline to continue to offer the depth and breadth of courses that are available at many institutions.

Education Course Descriptions

INTRODUCTION TO EDUCATION (2-3 semester credits): An overview of American education as both a professional and a public enterprise. Social, historical, and philosophical foundations give perspective to an examination of current issues, policies, and trends in the field of education, including cultural diversity. May include organization and structure, finance, and curriculum.

EDUCATIONAL PSYCHOLOGY (2-3 semester credits): The application of psychology principles to education. Special emphasis on understanding growth and development, the learning process, motivation, intelligence, evaluation, measurement, creativity, and the impact of culture on learning styles. May include observational experiences.

HUMAN GROWTH AND DEVELOPMENT (2-3 semester credits): A study of growth and development of the individual from conception through adulthood. Emphasis on social, emotional, cognitive, and physical aspects of growth and behavior related to school settings with special emphasis on the middle school years. A minimum of 20 hours of clinical experience focused on the social, emotional, cognitive and physical aspects of behavior, preschool through the twelfth grades with observation of the learners, not methodology, is strongly recommended.

EDUCATION OF EXCEPTIONAL INDIVIDUALS (2-3 semester credits): An overview of the field of special education. Includes identification of exceptional children, psychological implications of each exceptionality including, but are not limited to, learning disabilities. Guided observations in educational settings appropriate to each student's major are included.

OBSERVATION/CLINICAL EXPERIENCE HOURS[1] (0-1 semester credit): Documented clinical experience(s) involving observation of and interaction with children and practitioners at work, according to specified guidelines, within the appropriate subject matter and age category. This experience, comprising a minimum of 30-45 hours, is planned, guided, and evaluated by a mentor or supervisor and can occur in a variety of educational settings, including those with diverse student populations.

[1]Can be integrated or offered as a separate course.

SECONDARY EDUCATION PANEL

Public Universities

Christine Swarm, Northeastern Illinois University
Barbara Livingstone Nourie, Illinois State University
Carla Shaw, Northern Illinois University
Nancy Quisenberry, Southern Illinois University at Carbondale, **CO-CHAIR**
William Gallagher, Southern Illinois University at Edwardsville
Victoria Chou, University of Illinois at Chicago
Renee Clift, University of Illinois at Urbana-Champaign
Lynn Wolfmeyer, Western Illinois University

Private Institutions

Anna Lowe, Loyola University of Chicago
Tom Stevens, MacMurray College

Community Colleges

Wellington Wilson, Malcolm X College
Mike Bachmann, College of DuPage
Rich Pate, Danville Area Community College
John Beaupre, Illinois Central College
Kathy Doty, Frontier Community College
Max Jaeger, Lake Land College
George Vrhel, Sauk Valley Community College
Barbara McRaven, Spoon River College
Commodore Craft, South Suburban College
Sue Miles, Waubonsee Community College

Consultant

David Woodward, State Board of Education (1994-95)

Transfer Coordinators

David Greeson, Lake Land College
Larry Choate, Shawnee Community College, **CO-CHAIR**
Miriam Rivera, Northeastern Illinois University

Staff

Tim Rock, Board of Higher Education
Yvonne Singley, Illinois Community College Board

MUSIC

Any community or junior college student who intends to major in music for the baccalaureate degree is strongly encouraged to complete the Associate in Fine Arts (A.F.A.) degree in music, not the Associate in Arts (A.A.) degree or the Associate in Science (A.S.) degree prior to transfer.

To transfer as a junior into either a baccalaureate program with a major in Music or Music Education, students should select one of the two options described below in consultation with a music department advisor. ***Completion of the A.F.A. degree, however, does not fulfill the requirements of the Illinois General Education Core Curriculum,*** *nor does it fulfill the requirements for the A.A. or the A.S. degree. Therefore, students will need to fulfill the general education requirements of the institution to which they transfer. Transfer admission is competitive. Completion of one of the two options alone does not guarantee admission either to the baccalaureate program or to upper-division or specialty music courses.* ***Students may be required to demonstrate skill level through auditions and placement testing at the institution to which they transfer.*** *In some colleges and universities, a baccalaureate degree may also require competency in a foreign language.*

Associate in Fine Arts (A.F.A.) Degree
(with emphasis in music performance)

General Education Core Courses[1]	**28-32 semester credits**
Communication	9 semester credits
English Composition I (3 credits)	
English Composition II (3 credits)	
Speech (3 credits)	
Mathematics	3-4 semester credits
Physical and Life Sciences	7-8 semester credits
Humanities	6-7 semester credits
Social and Behavioral Sciences	3-4 semester credits

[1] *General education courses are described in the Illinois General Education Core Curriculum. Students who pursue the A.F.A. degree should not take Music Appreciation or Fundamentals of Music Theory to fulfill the Humanities requirement.*

Core Music Courses	**35 semester credits**
Music Theory	12 semester credits
Music Literature/History	3 semester credits
Keyboard Skills	4 semester credits[2]
Aural Skills	4 semester credits
Ensemble	4 semester credits
Applied Instruction	8 semester credits

[2] *Credit awarded for courses in keyboard skills varies among colleges and universities; whenever possible, the intent is for students to have completed four semesters of keyboard skills prior to transferring.*

Associate in Fine Arts (A.F.A.) Degree
(with emphasis in music education)

General Education Core Courses[1]	**25 semester credits**
Communication	9 semester credits
English Composition I (3 credits)	
English Composition II (3 credits)	
Speech (3 credits)	
Mathematics	3 semester credits
Physical and Life Sciences	7 semester credits
Humanities	
U.S./American History	3 semester credits
Social and Behavioral Sciences	
American/U.S. National Government	3 semester credits
Other Certification Requirements	**2 semester credits**
Health/Physical Development	2 semester credits

[1]General education courses are described in the Illinois General Education Core Curriculum.

Core Music Courses	**35 semester credits**
Music Theory	12 semester credits
Music Literature/History	3 semester credits
Keyboard Skills	4 semester credits[2]
Aural Skills	4 semester credits
Ensemble	4 semester credits
Applied Instruction	8 semester credits

[2]Credit awarded for courses in keyboard skills varies among colleges and universities; whenever possible, the intent is for students to have completed four semesters of keyboard skills prior to transferring.

Music Course Descriptions

MUSIC THEORY (12 semester credits): Study of introductory through advanced materials in diatonic and chromatic harmony; introduction to form and analysis and 20th century compositional methods.

MUSIC LITERATURE/HISTORY (3 semester credits): Introduction to the standard concert repertory through intensive guided listening. Representative works by major composers are chosen to illustrate the principal styles, forms, and techniques of vocal and instrumental music. Assumes a fundamental knowledge and understanding of the elements of music.

KEYBOARD SKILLS (4 semester credits): Sequential development of functional knowledge of the keyboard and playing skills sufficient to handle practical situations. Includes harmonization, transposition, sight-reading, improvisation, accompanying, ensemble playing, and keyboard literature appropriate to the level of the course in which the student is enrolled.

AURAL SKILLS (4 semester credits): Sequential courses in ear training, sight singing, and dictation. May include keyboard, computer-assisted instruction, and/or other applications, and may be integrated with Music Theory coursework.

ENSEMBLE (4 semester credits): Rehearsal and performance in concert band, orchestra, chorus, or jazz ensemble.

APPLIED INSTRUCTION (8 credits): Private tutorial that incorporates representative solo and study materials. Develops performance skills and a basic knowledge of appropriate literature. Includes public performance.

MUSIC PANEL

Public Universities

Donald Doig, Chicago State University
Jerry Daniels, Eastern Illinois University
Arved Larsen, Illinois State University
Charles Blickhan, Northern Illinois University
Dan Mellado, Southern Illinois University at Carbondale
Steve Brown, Southern Illinois University at Edwardsville
William Kaplan, University of Illinois at Chicago
Edward Rath, University of Illinois at Urbana-Champaign, **CO-CHAIR**

Community Colleges

Jerry Bolen, Belleville Area College
James Mack, Harold Washington College
Don Maki, Elgin Community College
Karen Bryant-Sala, John A. Logan College, **CO-CHAIR**
Bob Beifsnyder, Moraine Valley Community College
Glenna Sprague, Oakton Community College
Erwin Hoffman, Parkland College
Melody Wright, Richland Community College
Doug Tweeten, South Suburban College
Gary DeClue, John Wood Community College

Private Institutions

Ed Kocher, DePaul University
Mary Ellen Poole and
Steve Fiol, Millikin University
Ken Kistner, VanderCook College of Music

Consultants

Ann Collins, Association of Illinois Music Schools
Susan Richardson, State Board of Education

Transfer Coordinators

Susan Over, University of Illinois at Urbana-Champaign
Veldon Law, John Wood Community College
Robert Trusz, Millikin University

Staff

Jennifer Woods Quinn, Board of Higher Education
Barbara Risse, Illinois Community College Board

In October 1993, the Nursing Panel of the Illinois Health Articulation Project was established by the Illinois Board of Higher Education, in cooperation with the Illinois State Board of Education and the Illinois Community College Board, to develop a model articulated nursing curriculum that spanned the education of certified nurse assistant to licensed practical nurse to associate degree nurse to baccalaureate degree nurse. The panel was composed of representatives from high schools, vocational-technical centers, community colleges, public and private universities, as well as hospital-based diploma programs and industry. This report presents the findings, conclusions, and recommendations of the panel.

The nursing competency model presented here was developed based upon various assumptions that are stated later in the report; expansion of pathways to practice to include alternative paths to practice, such as school-to-work; and the study of other national nursing articulation models. The use of a professional education framework to articulation, along with an increased number of levels of articulation and inclusion of industry in its development, makes this nursing education model unique in its articulation of general education and nursing curricula.

Goals of the Illinois Health Professions Articulation Initiative and the Nursing Panel

The nursing panel addressed the following goals:

- To expand the number of qualified practitioners,
- To assure that graduates at each level possess the requisite knowledge and skills for practice,
- To provide opportunities for educational advancement in line with opportunities for career advancement,
- To expedite vertical and horizontal movement within and across the health professions, and
- To eliminate wasteful duplication and unnecessary expense for students/practitioners and programs alike.

Charge to the Nursing Panel

The nursing panel was charged to develop a model articulated curriculum that incorporates the competencies needed at all levels of practice within the profession. Specifically, the panel's completed articulated curriculum was to identify the general education core (communication, social science, etc.) and basic science competencies needed for licensure/certification at each level of practice; identify the technical and professional competencies needed for licensure/certification at each level; describe the specific courses and other experiences needed to develop the competencies identified in the major (including possible alternatives); and identify which courses and experiences could be offered via telecommunication systems to students at "distance" sites.

Initially, the nursing panel reviewed the Illinois General Education Core Curriculum, statements by professional and accrediting organizations, and licensure/certification requirements to determine what general education competencies were common between levels, as well as unique at each level, eliminating duplication between levels. In addition, the panel reviewed existing Illinois models and those in other states, statements by professional and accrediting organizations, and licensure/certification requirements to determine what technical and professional competencies were common, as well as unique at each level.

ASSUMPTIONS

The nursing panel adopted several assumptions in the early stages of the articulation process to guide the panel's work. As the framework for the process evolved and nursing competencies were developed, the panel expanded the set of working assumptions to include that:

1. Articulation is a voluntary process to facilitate educational progress for students.
2. Trust, respect, and continued participation are integral parts of the articulation process.
3. Individuals who are pursuing further education should be treated as mature adult learners.
4. Articulation allows for flexibility, choice, and diversity.
5. Each educational institution's mission, goals, and standards for admission, progression, and graduation are preserved.
6. Secondary education provides the academic preparation for nursing education and practice competencies.
7. Statewide articulated nursing models can be developed based on competencies and general education needed at each level.
8. Competencies at each level of education build upon previous competencies.
9. Completion of one level of nursing education does not guarantee that a graduate will have the ability and/or desire to progress to the next level.
10. Nurses in practice and education must collaborate in identifying and promoting levels of competency.
11. Faculty involvement is critical to developing articulation models.
12. Nursing graduates seeking placement through the articulation process will be licensed.
13. Program articulation is based on National League for Nursing accreditation for the LPN, ADN, Diploma, and BSN. CNA programs must be Illinois Department of Public Health approved.
14. Each individual educational institution is obligated to determine the required professional courses for which credits will be awarded.

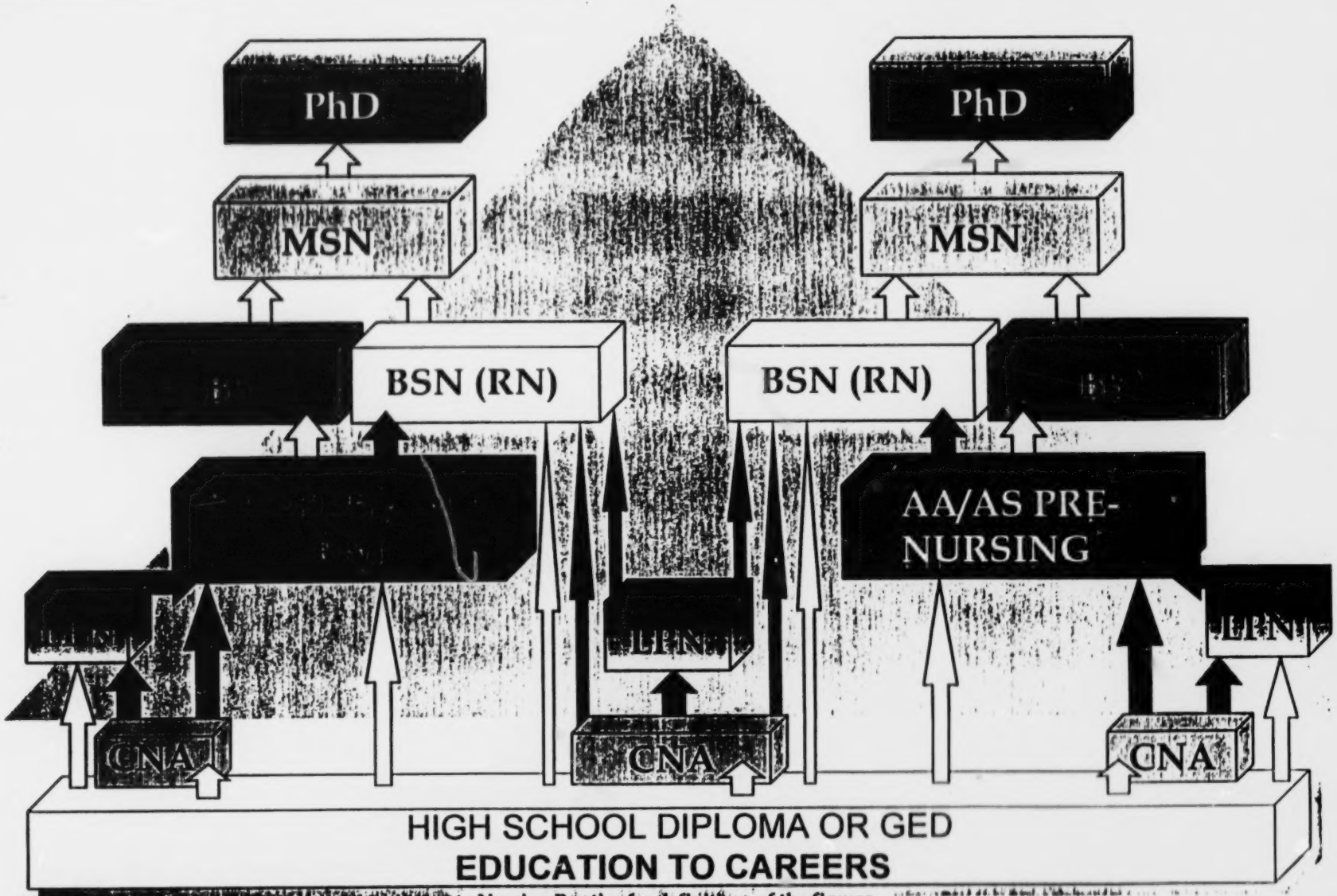
NURSING COMPETENCIES

In response to the nursing panel's charge to develop an articulated curriculum from secondary through postsecondary education, the panel first adopted the general framework of Educational Paths to Practice as found in *The Illinois Articulation Initiative: Articulation in Baccalaureate Majors* (May 1995). The nursing panel also developed educational paths to nursing practice as seen in Figure 1.

Table 1 demonstrates the articulation of core general education coursework from nursing assistant to an associate pre-nursing curriculum to a baccalaureate degree in nursing, while Table 2 demonstrates a career ladder approach from nursing assistant to licensed practical nurse to associate degree in nursing to the bachelor of science in nursing.

FIGURE 1

EDUCATIONAL PATHS TO NURSING PRACTICE *



* Please see the glossary for Educational Pathways to Nursing Practice for definitions of the figures.
Shaded arrows indicate alternative career pathways of Education to Careers while white arrows show traditional pathways.

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TABLE 1
CURRICULUM ARTICULATION IN NURSING (option 1)

	High School	Community College	University
	Certification: Nursing Assistant 15 units required for college admission	*A.A./A.S. in Pre-Nursing*	*B.S. in Nursing*
General Education		**General Education Core**[1]	**General Education Core**[1]
Communication	4 years: reading/writing, speaking/listening and literature	6 cr. composition 3 cr. speech	6 cr. composition 3 cr. speech
Math	3 years: algebra I, geometry, algebra II	3-6 cr. math	3-6 cr. math (statistics/computer)
Science	3 years: biology, chemistry, & physics	4 cr. biology (general) 4 cr. chemistry (general/inorganic)	4 cr. biology (general) 4 cr. chemistry (general/inorganic)
Social Sciences	3 years: history and government	9 cr. social sciences	9 cr. social sciences
Humanities		9 cr. humanities/fine arts	9 cr. humanities/fine arts
		Supporting Arts/Sciences	**Supporting Arts/Sciences**
		4 cr. human anatomy/physiology	4 cr. human anatomy/physiology or general bio
		4 cr. microbiology	4 cr. microbiology
		4-8 cr. chemistry (general/inorganic)	4-8 cr. chemistry (general/inorganic)
Nursing Coursework	2 years: Health Occupations I and II Service internship/apprenticeship CNA coursework= minimum of 3 cr. nursing transfer credit		41-65 cr. nursing coursework (Current range in Illinois) including clinical practicum

[1] Community college and university courses fulfill requirements for the transferable General Education Core Curriculum.

TABLE 2
CURRICULUM ARTICULATION IN NURSING (option 2)

	Secondary or Postsecondary Education		Postsecondary Education	
	Certified Nursing Assistant *15 H.S. units required for college admission*	**Licensed Practical Nurse**	**Licensed Registered Nurse ADN or Diploma**	**Licensed Registered Nurse BSN**
General Education			**General Education**	**General Education**
Communication	4 years: reading/writing, speaking/ listening and literature	3 cr. composition	6 cr. communication (including 3 cr. in composition)	6 cr. composition 3 cr. speech
Math	3 years: algebra I, geometry, algebra II			3-6 cr. math (statistics/computer)
Science	3 years: biology, chemistry, & physics			4 cr. biology (general) 4 cr. chemistry (general/inorganic)
Social Sciences	3 years: history and government	3 cr. social sciences	6 cr. social sciences	9 cr. social sciences
Humanities				9 cr. humanities/fine arts
		Supporting Arts/Sciences	**Supporting Arts/Sciences**	**Supporting Arts/Sciences**
		4 cr. human anatomy/physiology	4 cr. human anatomy/physiology 4 cr. microbiology	4 cr. human anatomy/physiology or gen bio 4 cr. microbiology 4-8 cr. chemistry (general/inorganic)
Nursing Coursework	2 years: Health Occupations I and II	20-42 cr. nursing coursework (Current Illinois range)	32-72 cr. nursing coursework (Current Illinois range)	41-65 cr. nursing coursework (Current range in Illinois)
	Service internship/apprenticeship	Clinical coursework/practicum	Clinical coursework/practicum	Clinical Practicum
	CNA coursework constitutes a minimum of 3 cr. nursing transfer	PN coursework constitutes a minimum of 15 cr. nursing transfer	ADN/Diploma constitutes a minimum of 30 cr. nursing transfer	

NOTES:
1. Community college and university general education courses are described in the transferable General Education Core Curriculum.
2. Nursing transfer credit is not additive.

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The model developed by the nursing panel acknowledges ideas from the articulation efforts of Colorado, Iowa, and the National League for Nursing, but differs from preceding models through the incorporation of secondary school occupational curriculum. The panel recognized that a consistent framework would have to provide direction across four levels of educational preparation. Thus, the nursing panel chose to use a broadly-based professional competency model described by Stark, Lowther, and Hagerty in an ASHE-ERIC Higher Education Report, *Responsive Professional Education* (Stark 1986). The nursing panel incorporated into that framework five functions of the nurse: provide, manage, teach, research, and member of the discipline.

These areas or functions were selected to reflect behavior expected of those persons engaged in providing nursing services, while the model competency categories of conceptual, technical, contextual, interpersonal communication, integrative, and adaptive were from the Stark professional educational model and adapted to nursing functions. For each function, the nursing panel developed a set of competencies.

Competency was defined as those behaviors that are common to all professional education and those behaviors that cut across disciplines. The framework chosen by the panel helped to describe each distinct expectation of ability and capacity at each stage of educational preparation in nursing. It provided sufficient latitude for nursing education to respond to change and the need to integrate expectations of general education into the curricula. The competency/function framework provided a consistent approach to the development of the articulated nursing model and allowed the panel to respond to the breadth of the charge from the coordinating boards.

At the heart of the competency statements is an understanding that the high school, community college, or public or private university nursing program would agree and guarantee the level of ability or competency within its curriculum. As a forward-looking model, it is based on the premise that changes will occur within the nursing field and that the model should be adaptive to such change. This broad conceptualization is the connecting thread that holds the articulation model together.

The nursing panel considered the introductory statements of the purpose of general education in undergraduate education from the Illinois Articulation Initiative. Those statements provided direction when deliberating the balance between general study and study directly related to professional competency development.

Reflecting on the general education expectations, as well as requirements at the secondary level, enabled the panel to develop competency statements that establish high standards which are achievable at each level of education. Academic preparation at the secondary level is consistent with the minimum college and university entrance requirements and lays the necessary foundation for a career in any health field.

The structure of the nursing articulation model provides sufficient direction for nursing programs and faculty to develop curricula that meet the expectations of the model, yet allows for institutional flexibility. Certified nurse assistant programs may be offered at the high school, community college, or other postsecondary location, while the LPN curriculum (high school plus additional postsecondary work) is not excluded from being offered by the next level of higher education.

Articulation and Education: Process and Implementation

The process of articulation addresses aspirations of students who want to pursue a higher level of practice in the field of nursing. As discussed elsewhere in this report, the charge to the nursing panel was to develop a statewide articulation plan as a model for institutions and to eliminate testing as part of the articulation process. As part of the process for meeting those goals, it was important

for the panel to acknowledge common expectations for practice in the field. Once that premise was accepted, developing a framework for working out articulation guidelines became the focus of the group.

A number of questions historically have accompanied discussions of articulation in nursing. These questions concerned education for the field of practice, the socialization processes and practices appropriate for the discipline, and the accepted processes for securing additional educational credentials. The challenges perceived as barriers to educational mobility need to be addressed by nurse educators in order to facilitate the process of developing articulation guidelines. Likewise, the challenge to nurses in practice, who are responsible for the continuing socialization of nursing practice, is to acknowledge the changes anticipated in performance as educational levels change.

A legislative definition for professional nursing is necessary in order to assure minimum safety standards and provide a credentialing mechanism for admission into practice. As a legal term, "professional nurse" has sometimes proved a barrier to articulation and expectations; however, the Nursing Practice Act provides competencies common to safe practice, allowing for discussion about articulation to proceed.

The breadth of nursing study is reflected by the requirements for practice in the Nursing Practice Act, as well as the continued leadership in the health care field. It seems clear that traditional and accepted expectations of a profession are personal behaviors that reflect an integration of liberal and humanistic perspectives with the more technical side of practice. Those perspectives develop through reflection on formal and individual educational experiences. Transcript evidence by itself is not sufficient, but does provide a baseline for future behavioral expectations. Valuing behaviors that demonstrate professional expectations develop over time and require concerted attention by the individual.

The framework chosen for this articulation model is one that combines a general education core with nursing competencies for practice. The categories are descriptive across functional areas, providing consistency of definition and expectation. Competencies common to the field of practice are verifiable and can be measured and remediated when necessary.

Attitudes considered fundamental to practice in the field are stated when appropriate. The framework developed by the panel does not address the attitudes expected as part of full professional development and status. These more complex attitudes are not readily isolated and thus not part of this consideration. These attitudes would be part of the socialization process and become a melding of the focus and mandates of educational institutions and individual development. Practice sites continue with the responsibility for socialization about valuing. The scope of professional attitude and value development ultimately are a personal choice and individual responsibility for all those aspiring to continued practice in the field.

There is sufficient breadth in this framework to allow curriculum development that is unique to an institution. Implementing the framework should not hinder those persons intent on preparing for a different practice responsibility.

The panel lists the following concerns that were addressed in developing the assumptions:

- In using National League for Nursing accreditation as an expectation of all participants in the articulation process, the panel determined that approval by NLN would constitute approval of curriculum.

- Each participating school would need to agree to develop curriculum in such a way that competencies agreed upon, as part of the articulation process, will be incorporated into curriculum to assure graduates of meeting expectations of the receiving institution.

- The articulation plan included the consideration of a "bridge process" which will include those courses, both general education and nursing, that span the receiving institution's core curriculum. In this way, each institution's mission, goals, and mandates are addressed and maintained. (It is not the expectation of the panel that a "bridge process" will be constructed in such a way that applicants are excluded from the articulation process.)

- An agreement among professional colleagues carries with it an expectation of "good faith" efforts to facilitate educational achievement of qualified persons and an expectation that graduates are prepared to meet the competency expectations of the (articulation) agreement.

Admission Process for Students

Students must have graduated within five years from an NLN accredited nursing program or state-approved CNA program. Each nursing student will need to meet the admission requirements of the program selected for admission. This articulation model uses escrow as the process for awarding credits (semester hours) for previous learning. Escrow is understood as a process through which a receiving school awards credit to a student without testing, once a bridge process is completed for competencies gained and credentialed through a previous academic process. A minimum amount of credit has been recommended by the panel--the maximum amount of credit to be awarded through this process will be determined by the receiving school.

The escrow and bridge processes are determined by the nursing program of the receiving institution. Those programs that are full participants in the articulation process will not use any means of testing nursing knowledge to determine placement of students. The receiving institution will determine how competencies outlined in the articulation process are acquired in the "home school" curriculum and will develop a bridge process to acknowledge this placement process. The bridge process may include general education coursework and most probably will include nursing coursework.

The minimum number of hours of nursing coursework transferrable for certified nurse assistant competencies stated in the nursing articulation model is three credits. The minimum number of hours transferrable for licensed practical nursing competencies stated in the model is 15 credits. The minimum number of hours transferrable for associate degree in nursing coursework is 30 credits.

For students who graduated five years or more ago from a nursing program, admission and awarding of credit for prior learning will be based on individual assessment. Students graduating from non-NLN accredited nursing programs will apply for transfer based on individual competencies, not the program articulation described in this report.

Criteria for Programs to Participate

A nursing program is a participant in the Illinois Nursing Articulation Initiative when it uses the nursing articulation model. In order to facilitate participation, NLN Accreditation for LPN, ADN, Diploma, and BSN programs and approval by the appropriate state agencies for all nursing programs is recommended. For those programs not accredited by the NLN, individual articulation agreements may be developed. Each program must revise curriculum to meet the competencies stated in the model and accepts the minimum credit in transfer. Each nursing program must agree to develop curriculum in such a way that competencies agreed upon as part of the articulation process will be incorporated into curriculum to assure graduates of meeting expectations of the receiving institution (i.e., the model nursing competencies). Each receiving program/institution will review the competencies, identifying the number of nursing credits to be placed in escrow for the student. Nursing credits may vary from institution to institution, but all institutions should award at least the minimum number defined in the model for any level on the pathways chart. That means that a university should accept in transfer a minimum of 3 credits for nursing coursework at the CNA level, regardless of educational level.

This articulation plan includes consideration of a "bridge process" which will include those courses, both general education and nursing, that span the expectations made of the receiving institutions. Participating institutions agree to accept the General Education Core coursework in transfer for the licensed practical nurse and associate degree nurse curriculum, and baccalaureate nurse curriculum, in addition to the nursing competencies.

PANEL RECOMMENDATIONS FOR IMPLEMENTING THE MODEL

1. Design a marketing plan to "sell" the model.

The panel attempted to keep the process "in front" of the professional community. Panel representatives communicated with colleagues across the state and were diligent in their work to accomplish the goals set before them. Further meetings are planned to continue with the implementation phase. Panel leadership also plans to present the Illinois Nursing Articulation Model to state and national nursing organizations.

2. Design a follow-up evaluation plan.

The panel recognized the model as the initial step in a five-year plan. Part of the process will include not only the implementation stages, but also the follow-up processes to ensure that objectives of the model have been addressed and that issues are resolved. A monitoring and evaluation plan needs to be developed.

3. Seek funding for implementing this model.

Seek funding through a Robert Woods Johnson Grant on nursing articulation. A process to assist all programs who wish in achieving and maintaining NLN accreditation is needed to meet the model guidelines.

4. Revise curriculum to meet competencies.

The panel expects significant consideration and revision of current curriculum is necessary for this model to be successful in meeting the goals of the initiative. The curricula of all programs and hours of "articulation credits" need to be reviewed prior to the implementation date. Evaluate curriculum for stronger emphasis on wellness, health promotion, and maintenance. Address cross-disciplinary curricular issues.

5. Targeted implementation date of fall 2000.

Students under this articulation model will be admitted to revised curriculum; therefore, an implementation plan needs to be developed providing sample direction for programs to follow.

6. Incorporate the general education core curriculum intended to facilitate transfer between or among institutions.

The transferability of general education core curriculum of nursing students also should be monitored for compliance with the model.

FUNCTION: PROVIDE				
COMPETENCIES	CNA	LPN	ADN/DIPLOMA	BSN
Conceptual - theoretical/foundational knowledge upon which professional practice is based	Uses basic concepts of biology, psychology, sociology, cultural diversity, socio-economics, spirituality, communications, nutrition, legal and ethical issues as related to activities of daily living.	Uses basic concepts of anatomy, physiology, chemistry, microbiology, physics, communications, growth and development, interpersonal relationships, psychology, spirituality, sociology, cultural diversity, pharmacology, nutrition and diet therapy, vocation, legal and ethical aspects of nursing.	Uses concepts in anatomy, physiology, chemistry, physics, microbiology, sociology, psychology, communications, growth and development, interpersonal relationships, group dynamics, cultural diversity, spirituality, pharmacology, nutrition and diet therapy, pathophysiology, ethics, nursing history, trends and theories, professional and legal aspects of nursing, leadership and management in nursing, and teaching-learning theory.	Uses concepts in anatomy, physiology, chemistry, physics, microbiology, sociology, psychology, communications, growth and development, inter-personal relationships, group dynamics, cultural diversity, spirituality, pharmacology, nutrition and diet therapy, pathophysiology, ethics, nursing history, trends and theories, professional and legal aspects of nursing, leadership and management in nursing, and teaching-learning theory and, in addition, uses concepts of nursing research and community health.
Technical/Professional - professional skills, including psychomotor, interpersonal, and cognitive skills	Observes and reports changes that affect clients ability to perform ADL's. Performs delegated nursing tasks under the direct supervision of a licensed nursing team member. Adheres to accepted standards.	Assists in collecting assessment data for individual clients. Delivers direct care as delegated. Adheres to accepted standards.	Establishes data base for client based on holistic assessment of health needs of clients. Delivers direct care based on accepted nursing standards.	Delivers and coordinates care for individuals and groups based on nursing theory, research, and accepted nursing standards. Establishes database for aggregate and community as a whole.
Contextual - examining and understanding the social, economic and cultural setting for professional practice	Identifies similarities and differences among clients. Shows respect for the individual.	Recognizes sociocultural differences that may affect care.	Incorporates understanding of sociocultural differences in the provision of care to clients and families.	Assesses and analyzes the impact of sociocultural differences in the coordination of care across the curriculum.
Interpersonal Communication - inclusive of all aspects of communication - writing, speaking, listening and reading comprehension.	Uses basic communication techniques. Shows respect for the individual.	Utilizes basic therapeutic communication techniques to establish/maintain nurse-client relationship. Documents care appropriately.	Utilizes techniques of therapeutic communication to establish and maintain therapeutic relationships, giving consideration to sociocultural differences.	Applies theories of therapeutic communication and analyzes the effects of sociocultural differences in the coordination of care across the curriculum.
Integrative - how to use theory in practice - includes reasoning, decision making, and problem solving (implies critical thinking).	Follows directives of licensed members of health care team.	Identifies common needs and problems and assists with the formulation of the individualized plan of care.	Analyzes data from client, family and other health care resources and selects appropriate nursing diagnosis.	Synthesizes data base to formulate and prioritize comprehensive actual and potential nursing diagnoses for the client, family and groups across the continuum of care.
Adaptive - working with change - detection of changing conditions, adapting to it - anticipating the need for change.	Adapts care as directed by licensed member of health care team.	Participates in the evaluation of nursing care given and implements necessary changes.	Evaluates client and significant other status and identifies alternative methods of meeting needs, incorporating an understanding of sociocultural differences.	Anticipates clients, significant other and group needs and modifies care based on evaluation, incorporating an in-depth understanding of sociocultural differences.

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FUNCTION: MANAGE - To take charge - someone who takes charge of or controls a situation; someone who can handle or succeed in accomplishing an affair of business.				
COMPETENCIES	CNA	LPN	ADN/DIPLOMA	BSN
Conceptual - theoretical/foundational knowledge upon which professional practice is based	Understands role of assistive worker.	Accepts management direction from supervisory personnel. Understands role as member of health care team.	Utilizes principles of leadership, problem solving and decision-making and conflict resolution in the management of care.	Integrates management and nursing theory in providing direction to health team participants. Applies principles of leadership applicable to management of client care within health care settings including communities.
Technical/Professional - professional skills, including psychomotor, interpersonal, and cognitive skills	Follows orders and guidelines of protocol. Is responsive to focus of health care team.	Organizes and provides care for own clients based on prioritized needs.	Establishes priorities for organizing nursing care among individual clients.	Uses management theory base to analyze and implement effective work systems. Establishes priorities for organizing nursing care for individuals, significant others and community groups. Develops strategies to obtain needed health care resources within the practice environment.
Contextual - examining and understanding the social, economic and cultural setting for professional practice	Identifies role of staff members within work setting.	Assists in providing guidance to assistive personnel within established protocols.	Recognizes individual client a..d family characteristics in establishing priorities for care.	Incorporates knowledge of individuals, families and community characteristics in planning health care for groups of clients.
Interpersonal Communication - inclusive of all aspects of communication - writing, speaking, listening and reading comprehension.	Is responsive to direction provided.	Uses effective interpersonal relationship skills with other members of the health care team.	Provides direction other members of the health care team.	Initiates interactions with all members of health care team to resolve problems, provide continuity of care. Interacts effectively with other members of the health care team in planning and directing patient care. Initiates interactions with all members of the health care team and others as appropriate.
Integrative - how to use theory in practice - includes reasoning, decision making, and problem solving (implies critical thinking).	Assists members of health care team with implementing plan of care. Reports problems observed to appropriate person.	Assists members of health care team with implementing plan of care. Under the supervision of RN, provides direction to health care personnel to whom care is delegated.	Collaborates with other members of the health care team in planning, providing and directing care. Delegates aspects of care to and supervises appropriate health care personnel.	Initiates and evaluates collaboration with other members of the health care team.

FUNCTION: MANAGE - To take charge - someone who takes charge of or controls a situation; someone who can handle or succeed in accomplishing an affair of business.				
COMPETENCIES	CNA	LPN	ADN/DIPLOMA	BSN
Adaptive - working with change - detection of changing conditions, adapting to it - anticipating the need for change.	Utilizes equipment and supplies in a cost effective manner.	Identifies need for change and brings needs to attention of supervisory personnel. Incorporates institutional changes into practice. Makes effective use of equipment and supplies while assuring quality care and client satisfaction.	participates in evaluation of established nursing standards and policies. provides support in implementing policy and practice changes. Adjusts practice to achieve cost effectiveness while maintaining quality.	Participates in the development and evaluation of standards of nursing care. Anticipates need for changing conditions within the work place based on current and projected reforms in health care delivery, costs and provisions of financial resources. Uses appropriate equipment and supplies in a cost effective manner while maintaining and assuring quality and client satisfaction. Uses formal/informal power sources to initiate changes to improve client care.

FUNCTION: TEACH - based on educational theory - to show or help to learn how to do something - to train or cause to understand				
COMPETENCIES	CNA	LPN	ADN/DIPLOMA	BSN
Conceptual - theoretical/foundational knowledge upon which professional practice is based	Recognizes need for environment conducive to learning.	Understands critical elements of individualized teaching plans.	Applies teaching/learning princi..es to adapt standardized teaching plans to meet individual learner needs.	Integrates theory of learning and nursing in design of teaching for individuals, groups and communities.
Technical/Professional - professional skills, including psychomotor, interpersonal, and cognitive skills	Reports client questions to LPN/RN	Assists in the formulation and implementation of a teaching plan. Gathers and reports data about learning needs as directed by plan of care.	Assesses learning readiness of clients and families. Modifies standard teaching plans to meet individual needs. Implements and documents appropriate teaching of the client/significant others.	Assesses learning readiness for clients, families and groups. Establishes and coordinates and evaluates the implementation of comprehensive teaching plans for clients, families and groups.
Contextual - examining and understanding the social, economic and cultural setting for professional practice	Identifies similarities and differences among clients.	Identifies sociocultural differences that may effect teaching/learning.	Selects an appropriate teaching methodology to implement the teaching plan while incorporating an understanding of sociocultural differences.	Designs plans within the socio economic cultural context of the learner.
Interpersonal Communication - inclusive of all aspects of communication - writing, speaking, listening and reading comprehension.	Reports client responses to teaching plan.	Uses basic therapeutic communication technology and terminology appropriate to client's level of understanding to reinforce teaching plan.	Utilizes appropriate therapeutic communication techniques when providing instruction to clients and their families.	Applies theories of therapeutic communication in the teaching/learning process with individuals, families, groups and communities.
Integrative - how to use theory in practice - includes reasoning, decision making, and problem solving (implies critical thinking).	Follows practices prescribed in teaching plan.	Participates with other members of the health care team in the use of standard teaching guides selected for specific situations as directed.	Collaborates with other members of the health care team in the implementation of individualized teaching plan.	Directs collaboration with other members of health care team in development and implementation of individual teaching plans.
Adaptive - working with change - detection of changing conditions, adapting to it - anticipating the need for change.	Reports observations.	Collects data about effectiveness of teaching/learning plan as directed.	Modifies teaching/learning plan based on evaluation of learner response.	Modifies teaching/learning plan to acknowledge anticipated needs.

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FUNCTION: RESEARCH - to carefully, systematically, and patiently investigate a field of knowledge, by a search for facts

COMPETENCIES	CNA	LPN	ADN/DIPLOMA	BSN
Conceptual - theoretical/foundational knowledge upon which professional practice is based	Expectations for CNAs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Recognizes research as a source of knowledge for practice.	Recognizes that nursing behaviors are guided by and emerge from behavioral and physiological theories. Understands the ethical and legal rights of the individual in the research process.	Identifies appropriate use of common nursing theories, behavioral and physiological theories in research. Understands the ethical and legal principles of research.
Technical/Professional - professional skills, including psychomotor, interpersonal, and cognitive skills	Expectations for CNAs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Participates in data collection within established studies.	Carries out established research protocols.	Designs and implements studies to evaluate care. Modifies care to reflect research findings.
Contextual - examining and understanding the social, economic and cultural setting for professional practice	Expectations for CNAs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Recognizes the right of the individual in the research process.	Understands the applicability of findings based on variation (age, gender, race, etc.) of individual clients. Ensures rights of individual clients in the research process.	Incorporates the ethical principles and the consideration of socio-economic-cultural developmental differences in the design and implementation of nursing research studies.
Interpersonal Communication - inclusive of all aspects of communication - writing, speaking, listening and reading comprehension.	Expectations for CNAs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Reports observed responses and relays questions to protocol coordinator.	Participates in determining feasibility of research plans.	Interprets research directives for plans of care. Summarizes research findings as applicable for practice; applies research findings in implementation of nursing care.
Integrative - how to use theory in practice - includes reasoning, decision making, and problem solving (implies critical thinking).	Expectations for CNAs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Expectations for LPNs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Uses research findings in problem solving and decision making as part of the health care team. Participates in the integration of research results in the modification of practice standards, policies and procedures.	Applies research results appropriately in modifying practice standards, policies and procedures.
Adaptive - working with change - detection of changing conditions, adapting to it - anticipating the need for change.	Expectations for CNAs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Expectations for LPNs in caring for patients under research protocols do not differ from those under Provide, Manage, Teach or Member of Discipline.	Identifies areas of uncertainty in practice which merit study.	Recognizes inconsistent research results.

MEMBER OF DISCIPLINE				
COMPETENCIES	CNA	LPN	ADN	BSN
Conceptual - theoretical/foundational knowledge upon which professional practice is based	Adheres to the Patient's Bill of Rights. Participates in activities for knowledge and information update. Follows basic ethical principles. Understands the scope of practice as described in the Federal Register (OBRA).	Understands the purposes and functions of professional associations. Identifies ethical behavior and practices within an ethical framework. Understands the scope of practice of PN as defined in the Illinois Nursing Act and its Rules of Administration of the Act. Understands the code for nurses as the ethical framework for practice. Understands the scope of practice as described in the Federal Register (OBRA).	Understands the scope of practice for RN as defined in the Illinois Nursing Act and its Rules of Administration for the Act. Understands the Code for nurses as the ethical framework for practice. Understands the scope of practice as described in the Federal Register (OBRA).	Understands the scope of practice for RN as defined in the Illinois Nursing Act and its Rules of Administration for the Act. Identifies the essential elements of any nurse practice act. Understands the interface of nursing and other health disciplines. Understands the Code for Nurses as the ethical framework for practice. Understands the scope of practice as described in the Federal Register (OBRA).
Technical/ Professional - professional skills, including psychomotor, interpersonal, and cognitive skills.	Practices within job description of health care agency. Is responsible for work performance. Seeks assistance from peers and other members of health care team.	Practices within the definition of Practical Nurse as contained in Nurse Practice Act and adheres to the nursing code of ethics. Is accountable for own practice and for nursing care delegated to peers and assistive personnel. Seeks assistance from peers and other members of the health team in situations that require higher level of knowledge. Participates in professional learning activities.	Practices within the definition of registered as contained in the Nurse Practice Act and adheres to the nursing code of ethics. Is accountable for own practice and for nursing care delegated to peers and assistive personnel. Seeks assistance from peers and other members of the health care team in situations that require higher level of knowledge. Values professional growth and participates in professional development.	Practices within legislative, regulatory, ethical and professional standards that define the scope of practice. Promotes accountability for quality nursing practice. Seeks assistance from peers and other members of the health care team in situations that require higher level of knowledge. Facilitates professional growth in others and provides professional development activities.
Contextual - examining and understanding the social, economic and cultural setting for professional practice.	Promotes a positive personal image of nursing. Adheres to employment guidelines as defined by employer. Respects cultural differences among health care providers.	Promotes a positive personal and professional image of nursing. Respects cultural differences among health care providers.	Promotes a positive personal and professional image. Uses political system to improve patient care, nursing practice and health care. Incorporates knowledge of cultural differences in working with other health care providers.	Uses political process to promote change in health care policy to improve patient care, nursing practice, and health care. Promotes an environment that capitalizes on the cultural diversity of the health care providers.

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MEMBER OF DISCIPLINE				
COMPETENCIES	CNA	LPN	ADN	BSN
Interpersonal Communication - inclusive of all aspects of communication - writing, speaking, listening and reading comprehension.	Maintains confidentiality. Follows directions from supervisor. Reports concerns of clients and significant others to others to the appropriate person.	Maintains confidentiality. Communicates concerns related to health care delivery within the practice setting.	Maintains confidentiality. Serves as an advocate for clients. Shares knowledge of issues of health and health care delivery system with those shaping health care policy and legislation.	Uses leadership and political strategies to influence the development of cost-effective health care services for clients, families and/or groups. Maintains confidentiality and promotes confidentiality in other health care workers. Promotes consumer awareness of nursing's contribution to health care.
Integrative - how to use theory in practice - includes reasoning, decision making, and problem solving. (implies critical thinking)	Is accountable for own action/performance.	Assumes responsibility and accountability for care provided.	Behaves in a manner that reflects a high level of professional ethics. Utilizes a framework that reflects a high level of professional ethics. Assumes responsibility and accountability for care provided and delegated.	Applies appropriate ethical and decision making frameworks. Promotes accountability for quality nursing practice.
Adaptive - working with change - detection of changing conditions, adapting to it - anticipating the need for change.	Is receptive to constructive criticism and takes action to learn and grow.	Assesses own abilities and potential and sets goals that demonstrate ongoing personal and professional growth. Seeks assistance for colleagues whose behavior indicates potential impairment.	Assesses own abilities and potential, sets goals and demonstrates on-going personal and professional development. Utilizes nursing organizations to enhance professional growth. Reports ethical dilemma encountered in practice and constructs a course of action when confronted.	Develops long range plans for personal and professional development to enhance the profession of nursing. Participates in nursing organizations to improve health care and to promote collegiality among nurses. Develops mechanisms for identifying and resolving concerns/conflicts related to standard of practice. Compares quality of care and outcomes to established standards. Takes action to correct deficiencies.

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NURSING ARTICULATION PANEL

Ruth Gresley
School of Nursing
Southern Illinois University at Edwardsville

Lucille Davis, Dean
College of Nursing and Allied Health
Chicago State University

Mary Mulcahy, CO-CHAIR
Dean, Health and Human Services
Sangamon State University

Wendy Young
College of Nursing
University of Illinois at Chicago

Susan Livingston, Director
School of Nursing
Graham Hospital Association

Mary LeBold, Dean
School of Nursing
St. Xavier University

Jean Lytle, Chair
Council of Deans & Directors Baccalaureate
Programs and Higher
Elmhurst College

Denise Williams, Dean
Academic Affairs
Mennonite College of Nursing

Judith R. Dincher, Director
Nursing Program
William Rainey Harper College

Carole Caresio Haas, Director
Nursing Program
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Ina Latimer, Director
Nursing Program
Triton College

Sandy McKelvie, Director
LPN Program
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Maryann Vaca, Director
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Elgin Community College

Shirley Asher, Director
Rockford School of Practical Nursing

Dana Sprenger-Trantor, Instructor
Health Occupations
Quincy Area Vocational-Technical Center

Alice Allen
Critical Care Services
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Deb Clark
Clinical Specialist
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Jackie McFalls, CO-CHAIR
Nurse Manager, Labor and Delivery
Rockford Memorial Hospital

Pat Peverly
Director of Nursing
Anderson Hospital

Eugene Magac, University Director
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Southern Illinois University at Edwardsville

Arthur Parrish, Dean
University Transfer Programs
Belleville Area College

Kathryn Torricelli
Health Occupations Programs
State Board of Education

Peg Sebastian
Director of Nursing
Illinois Hospital Association

Donna Corriveau, Assistant Director,
Academic Affairs
Illinois Board of Higher Education

PSYCHOLOGY

Community and junior college students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer. To transfer as a junior into a baccalaureate psychology program, students must complete a minimum of 60 semester credits. Freshmen and sophomores who plan to major in psychology are encouraged to fulfill general education requirements with foundation courses in the sciences (e.g., biology, chemistry, physics, and anatomy and physiology) and mathematics (e.g., college algebra, calculus, and statistics). The number of psychology courses taken during this time should be minimized.

General Education Core Courses[1]	**37-41 semester credits**
Communication	9 semester credits
Mathematics	3-6 semester credits
Physical and Life Sciences	7-8 semester credits
Humanities and Fine Arts	9 semester credits
Social and Behavioral Sciences	9 semester credits

[1]*General education courses are described in the Illinois General Education Core Curriculum.*

Required Psychology Prerequisite Course	**3 semester credits**
Introduction to Psychology[2]	3 semester credits

[2]*As described in the General Education Core Curriculum.*

Other Psychology Courses	**3-9 semester credits**

A maximum of three courses, beyond Introduction to Psychology, from the list below are guaranteed for transfer credit under the following conditions: If the receiving institution offers the course as a lower division course, then course-for-course transfer is guaranteed; if the receiving institution does not offer the course, or does not offer the course at the lower level, the student will receive elective, lower division, psychology credit for the course.

One developmental psychology course, selected from: Child Development, Adolescent Development, and Adult Development and Aging *or one course that combines two or more of the topic areas* (e.g., Child/Adolescent, Adolescent/Adult, Lifespan)	3 semester credits
Abnormal Psychology	3 semester credits
Industrial/Organizational Psychology	3 semester credits
Theories of Personality	3 semester credits
Social Psychology	3 semester credits

This list is not meant to limit the transferability of additional courses in psychology or to discourage the development of new courses (e.g., cognitive psychology, sensation and perception, physiological psychology, the psychology of learning). The current articulation process should continue between individual institutions for courses not on this list. Academic advisors should continue to be knowledgeable of transfer requirements at various colleges and universities, and students should regularly consult with their advisors throughout their academic careers. The panel believes it is in the best interests of students and the discipline to continue to offer the depth and breadth of courses that are available at many institutions.

Psychology Course Descriptions

CHILD DEVELOPMENT (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods,
- Biological foundations and genetics from conception to birth;
- Physical development from infancy to adolescence;
- Cognitive development from infancy to adolescence;
- Language development from infancy to adolescence;
- Emotional development from infancy to adolescence; and
- Social development from infancy to adolescence.

ADOLESCENT DEVELOPMENT (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods;
- Biological development;
- Cognitive development;
- Social development, including family relationships, friendships, and peer relations;
- The school experience, career choice, and the college experience; and
- Self-identity, adjustment, and the development of intimacy and sexuality.

ADULT DEVELOPMENT AND AGING (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods;
- Biological changes across adulthood;
- Mental health across adulthood;
- Sensation and perception across adulthood;
- Learning and memory across adulthood;
- Intelligence, creativity, and wisdom across adult-hood;
- Personality and motivation across adulthood; and
- Relationships within and between generations, occupational patterns, leisure and community involvement, social issues, and social support.

ABNORMAL PSYCHOLOGY (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods;
- Definition, assessment, and categorization of abnormal behavior;
- Biological, psychosocial, and sociocultural origins of abnormal behavior; and
- Treatment and prevention.

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods;
- Personnel selection, placement, and training;
- Job analysis and performance appraisal;
- Job satisfaction and motivation;
- Leadership;
- Organizational decision-making; and
- Organizational development.

THEORIES OF PERSONALITY (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods;
- Personality assessment;
- The psychoanalytical and neopsychoanalytical approaches;
- The trait approach;
- The humanistic approach;
- The cognitive approach; and
- The behavioral/social learning approach.

SOCIAL PSYCHOLOGY (3 semester credits): Integration of theory and empirical research as they relate to:

- Research methods;
- Attitude formation and change;
- Social cognition;
- Interpersonal relations;
- Group processes; and
- Social influence.

PSYCHOLOGY PANEL

Public Universities

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Macon Williams, Illinois State University
Gordon Pitz, Southern Illinois University at Carbondale
Ken Kleinman, Southern Illinois University at Edwardsville
Joseph Stokes, University of Illinois at Chicago
Karen Kirkendall, University of Illinois at Springfield
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Teresa Bossert, McHenry County College
Edith Rose, Prairie State College
Bruce Hill, Triton College
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Denny Frueh, University of Illinois at Springfield
Dan DeCaprio, Lewis University

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Darcy McGrath, Illinois Community College Board